You can be involved in and contribute to today's exciting advances in paleontology. Many museums and colleges offer opportunities for volunteers to study and work alongside trained professional paleontologists. Contact your local institutions to see how you can help.

You can also help the BLM preserve paleontological resources by leaving them as you found them for you and others to enjoy whenever visiting public lands. If you think a fossil or track, especially a vertebrate fossil, may be unique and of scientific interest, or may be damaged or destroyed, do not collect it. Please report your finding and the location to the nearest BLM office. This way, land managers can alert professional scientists to ensure that the paleontological resources are properly recorded and cared for. Please do not attempt to remove them yourself. Important information may be lost, no matter how careful you might be.

We hope that you will enjoy the opportunities to collect and learn about fossils on your public lands. If you have any questions or want to know more about collecting fossils, please visit

www.blm.gov/heritage to find more information on paleontology, fossil collecting, permits, and your local BLM offices.

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# FOSSILS

on America's Public Lands



### **FOSSILS**

#### Tyrannosaurus. Allosaurus. Triceratops.

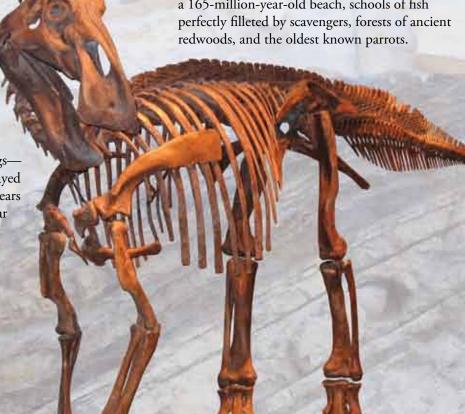
The mere words send the imagination soaring. Children and adults alike are fascinated by the deep past and fossils of all kinds. We hope that this guide will help you understand more about the importance of fossils and also appreciate the public lands that preserve remnants of past ages.

### WHAT ARE FOSSILS?

Fossils are the remains or traces of any organism preserved in the Earth's crust, and paleontology is the study of fossils. Through the careful collection and study of fossils, we can learn the stories of origins and endings—life, death, and change—played out over nearly 3.5 billion years of the Earth's 4.5-billion-year history.

### WHERE ARE FOSSILS FOUND?

Americans share an extraordinary natural legacy—the public lands. The Bureau of Land Management (BLM) manages more than 245 million acres of public lands in the Western United States, lands where *Edmontosaurus*, *Stegosaurus*, *Deinonychus*, and *Pentaceratops* once roamed. Well-preserved dinosaur fossils are often found in the steep, arid, and deeply eroded terrain in the West. Other fossils, though perhaps less stimulating to the imagination than dinosaur skeletons, are also preserved on our public lands: perfect leaves and flowers, dinosaur tracks on a 165-million-year-old beach, schools of fish perfectly filleted by scavengers, forests of ancient redwoods, and the oldest known parrots.



### WHY IS STUDYING FOSSILS IMPORTANT?

Scientists get clues from fossils left by everything from the tiniest bacteria to some of the largest creatures ever to roam the Earth, swim in its seas, or soar in its skies. These clues help us solve the fascinating riddles of how life on Earth evolved. Fossils illustrate how all forms of life are interdependent and affected by their environment. In addition, fossils are simply fun to study because of their natural beauty and the excitement, wonder, and understanding they evoke about life in ancient worlds lost in time, worlds that we can only imagine.

#### MAY I COLLECT FOSSILS?

The Omnibus Public Land Management Act, Paleontological Resource Preservation subtitle (16 U.S.C. 470aaa) provides for the casual collection of common invertebrate and plant paleontological resources from BLM public lands. You may casually collect a variety of specimens of common invertebrate and plant paleontological resources without a permit. However, only reasonable amounts of specimens can be collected. Specimens are small samples that are easily transportable by hand. In addition, you can only collect from the surface or by using nonpowered hand tools. Casual collecting activities may not cause disturbance to the surface or other natural or cultural resources.

Some areas might have special designations that restrict collecting, access, and other activities. It is always a good idea to stop by the nearest BLM office to check on conditions, such as land status, fire danger, or road closures. On private land,

fossils may be collected only with the permission of the landowner.

#### Common Invertebrate and Plant Fossils:

You may collect reasonable amounts of common invertebrate fossils, such as trilobites, ammonites, and brachiopods. You may also collect reasonable amounts of common plant fossils, such as leaves, cones, and seeds.

The invertebrate and plant fossil specimens you collect are for personal use and enjoyment and may not be used for commercial purposes. Please remember to leave some for the next collector, too.

Some invertebrate and plant paleontological resources are not common and require a permit to collect. Scientifically important invertebrate and plant paleontological resources can only be collected by qualified researchers and curated in approved repositories.

#### **Petrified Wood:**

You may collect limited quantities without charge:

- Up to 25 pounds of petrified wood, plus one piece, each day.
- No more than 250 pounds in any calendar year without a permit.

 Hobby specimens are for personal use and may not be bartered or sold.

You may not combine your allowance with another collector's allowance to obtain larger pieces of petrified wood.

#### **Vertebrate Fossils:**

Vertebrate fossils may only be collected by qualified researchers with a permit because of their relative rarity and scientific importance.

They include not only bones and teeth, but also footprints, burrows, and other traces of activity.

Vertebrate fossils are fragile and complex, and permit applicants must be able to show a sufficient level of training and experience in order to collect them. In addition, all vertebrate fossils collected under a permit must be curated in an approved repository.

## WHAT ABOUT ARCHAEOLOGICAL ARTIFACTS?

Archaeological
artifacts are
cultural
resources that
are stringently
protected by law
because of their
extraordinary
scientific
importance for the
history of humans. Fossils
associated with archaeological artifacts are also
protected.

### WHERE CAN I COLLECT FOSSILS?

You may casually collect specimens of common invertebrate and plant paleontological resources without a permit on most BLM public lands. All National Park Service, U.S. Fish and Wildlife Service, and Bureau of Reclamation lands are closed to casual collecting of common invertebrate and common plant fossils.

Certain BLM lands are also closed to casual collecting of fossils. You must check the land use plans or the local BLM office for these types of lands:

- Developed recreation sites
- Some national monuments and national conservation areas
- All outstanding natural areas
- Some specially designated lands, such as areas of critical environmental concern
- Active mining operations
- Emergency closures

Remember, illegal collecting, including taking or damaging vertebrate fossils, is against the law. Your help is important to preserve America's natural heritage for future generations!



